ABSTRACT OF THE INVENTION

A method for evaluating a biological sample containing at least one cell type bearing at least one cellular target and at least one soluble analyte, involves adding to a single container the sample with (i) at least one soluble ligand that binds the cellular target, (ii) either at least one soluble ligand that binds the soluble analyte or at least one competing soluble analyte; and (iii) a solid phase capture medium that binds directly to the soluble analyte, indirectly to the soluble analyte, or to the soluble ligand that binds to the soluble analyte. Various complexes involving the capture medium and soluble analyte, the capture medium and the soluble ligand, and/or the cellular target and a soluble ligand are simultaneously analyzed without physically separating the complexes.